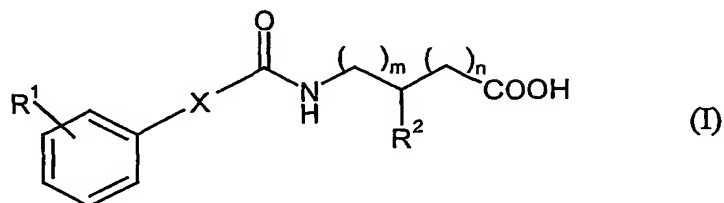


Claims

1. A carboxamide derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof:

5



wherein

10

m and n independently represent an integer from 0 to 2;

-X- represents -CH₂-CH₂-, -CH=CH-, or -C≡C-;

15

R¹ represents -OR¹¹, -SR¹¹, -SOR¹¹, -SO₂R¹¹, -NR¹²R¹³, or -CHR¹⁴R¹⁵,

wherein

20

R¹¹ represents (C₂-₆)alkenyl optionally substituted by aryl or heteroaryl, (C₂-₆)alkynyl optionally substituted by aryl or heteroaryl, or (C₁-₆) alkyl optionally substituted by aryl or heteroaryl;

25

R¹² and R¹³ independently represent hydrogen, (C₂-₆)alkenyl optionally substituted by aryl or heteroaryl, (C₂-₆)alkynyl optionally substituted by aryl or heteroaryl, or (C₁-₆) alkyl optionally substituted by aryl or heteroaryl,

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or

5 R^{12} and R^{13} together with the nitrogen atom to which they are attached, form a 5-7 membered saturated hetero ring optionally interrupted by O or NH;

10 R^{14} and R^{15} independently represent hydrogen, (C₂₋₆)alkenyl optionally substituted by aryl or heteroaryl, (C₂₋₆)alkynyl optionally substituted by aryl or heteroaryl, (C₁₋₆) alkyl optionally substituted by aryl or heteroaryl, or (C₁₋₆) alkoxy optionally substituted by aryl or heteroaryl,

or

15 R^{14} and R^{15} together with the CH to which they are attached, form a (C₃₋₈)cycloalkyl optionally interrupted by NH, or O, or a phenyl optionally substituted by hydroxy, halogen or (C₁₋₆) alkyl; and

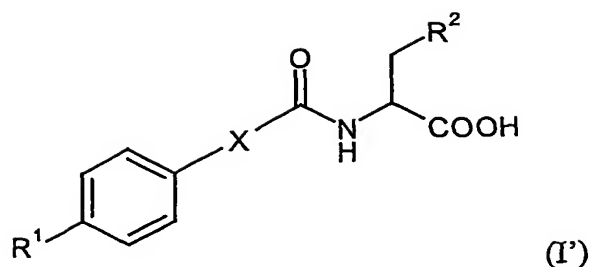
20

R^2 represents hydrogen, cyano, (C₁₋₆) alkoxy, (C₂₋₆)alkenyl, (C₂₋₆)alkynyl, (C₃₋₇)cycloalkyl, or (C₁₋₆) alkyl optionally substituted by amino, (C₁₋₆)alkylamino, or phenyl.

25

2. A carboxamide derivative of the formula (I'), its tautomeric or stereoisomeric form, or a salt thereof:

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wherein

5 -X- represents $-\text{CH}_2-\text{CH}_2-$, $-\text{CH}=\text{CH}-$, or $-\text{C}\equiv\text{C}-$;

R^1 represents $-\text{OR}^{11}$, $-\text{SR}^{11}$, $-\text{SOR}^{11}$, $-\text{SO}_2\text{R}^{11}$, $-\text{NR}^{12}\text{R}^{13}$, or $-\text{CHR}^{14}\text{R}^{15}$,

wherein

10

R^{11} represents (C_{2-6}) alkenyl optionally substituted by aryl or heteroaryl, (C_{2-6}) alkynyl optionally substituted by aryl or heteroaryl, or (C_{1-6}) alkyl optionally substituted by aryl or heteroaryl;

15

R^{12} and R^{13} independently represent hydrogen, (C_{2-6}) alkenyl optionally substituted by aryl or heteroaryl, (C_{2-6}) alkynyl optionally substituted by aryl or heteroaryl, or (C_{1-6}) alkyl optionally substituted by aryl or heteroaryl,

20

or

R^{12} and R^{13} together with the nitrogen atom to which they are attached, form a 5-7 membered saturated hetero ring optionally interrupted by O or NH;

25

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5 R^{14} and R^{15} independently represent hydrogen, (C_{2-6}) alkenyl optionally substituted by aryl or heteroaryl, (C_{2-6}) alkynyl optionally substituted by aryl or heteroaryl, (C_{1-6}) alkyl optionally substituted by aryl or heteroaryl, or (C_{1-6}) alkoxy optionally substituted by aryl or heteroaryl,

or

10 R^{14} and R^{15} together with the CH to which they are attached, form a (C_{3-8}) cycloalkyl optionally interrupted by NH, or O, or a phenyl optionally substituted by hydroxy, halogen or (C_{1-6}) alkyl; and

15 R^2 represents hydrogen, cyano, (C_{1-6}) alkoxy, (C_{2-6}) alkenyl, (C_{2-6}) alkynyl, (C_{3-7}) cycloalkyl, or (C_{1-6}) alkyl optionally substituted by amino, (C_{1-6}) alkylamino, or phenyl.

20 3. The carboxamide derivative, its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1 or 2,

wherein

25 R^1 represents $-OR^{11}$, $-SR^{11}$, $-SOR^{11}$, $-SO_2R^{11}$, $-NR^{12}R^{13}$, or $-CHR^{14}R^{15}$,

wherein

30 R^{11} represents (C_{2-6}) alkenyl substituted by aryl or heteroaryl, (C_{2-6}) alkynyl substituted by aryl or heteroaryl, or (C_{1-6}) alkyl substituted by aryl or heteroaryl;

R¹² and R¹³ independently represent (C₂₋₆)alkenyl substituted by aryl or heteroaryl, (C₂₋₆)alkynyl substituted by aryl or heteroaryl, or (C₁₋₆) alkyl substituted by aryl or heteroaryl;

R¹⁴ and R¹⁵ independently represent (C₂₋₆)alkenyl substituted by aryl or heteroaryl, (C₂₋₆)alkynyl substituted by aryl or heteroaryl, (C₁₋₆) alkyl substituted by aryl or heteroaryl, or (C₁₋₆) alkoxy substituted by aryl or heteroaryl.

4. The carboxamide derivative, its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1 or 2,

15 wherein

R¹ is phenoxy(C₁₋₆)alkyl, phenoxy(C₁₋₆)alkenyl, phenoxy(C₁₋₆)alkynyl, or phenyl(C₁₋₆)alkoxy.

20 5. The carboxamide derivative, its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1 or 2,

wherein

25 R^2 is phenyl (C₁₋₆)alkyl.

6. The carboxamide derivative, its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1 or 2,

30 wherein

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R² is benzyl.

7. The carboxamide derivative, its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1, wherein said derivative is selected from the group consisting of the following compounds:

N-(4-phenoxyethylcinnamoyl)phenylalanine;
N-[3-(4-Phenoxyethylphenyl)propionyl]phenylalanine;
N-(4-Phenoxyethylphenylpropioloyl)phenylalanine; and
N-(4-Benzoyloxyethylcinnamoyl)phenylalanine.

8. A medicament comprising the carboxamide derivative, its tautomeric or stereoisomeric form, or a physiologically acceptable salt thereof as claimed in claim 1 or 2 as an active ingredient.

9. The medicament as claimed in claim 8, further comprising one or more pharmaceutically acceptable excipients.

10. The medicament as claimed in claim 8, wherein the carboxamide derivative, its tautomeric or stereoisomeric form, or a physiologically acceptable salt thereof is an IP receptor antagonist.

11. The medicament as claimed in claim 8 for prophylaxis and/or treatment of urological disorder or disease.

12. The medicament as claimed in claim 8 for prophylaxis and/or treatment of pain.

13. The medicament as claimed in claim 8 for prophylaxis and/or treatment of hypotension.

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14. The medicament as claimed in claim 8 for prophylaxis and/or treatment of hemophilia and hemorrhage.
- 5 15. The medicament as claimed in claim 8 for prophylaxis and/or treatment of inflammation.
16. Use of compounds according to Claims 1 for manufacturing a medicament for the treatment and/or prophylaxis of urological disorders.
- 10 18. Process for controlling urological disorders in humans and animals by administration of an IP receptor-antagonistically effective amount of at least one compound according to claims 1.